

# **Drought Status and Outlook**

**Latest Drought Information Statement** 

December 31, 2021

National Weather Service Spokane

## Severe and Extreme Drought for the Inland NW



U.S. Drought Monitor
Pacific Northwest DEWS

Drought conditions continue to show improvements in the last month across the Inland Northwest, especially extreme eastern Washington and the Idaho Panhandle.

- Extreme (D3) drought continues to shrink in southeast WA
- Severe (D2) decreased in the ID Panhandle

https://droughtmonitor.unl.edu/

#### December 28, 2021

(Released Thursday, Dec. 30, 2021)
Valid 7 a.m. EST

Drought Conditions (Percent Area)

|   | None  | D0-D4  | D1-D4 | D2-D4 | D3-D4 | D4    |
|---|-------|--------|-------|-------|-------|-------|
| Сиптепт                                 | 14.84 | 85.16  | 79.30 | 56.73 | 26.68 | 6.94  |
| Last Week<br>12-21-2021                 | 10.93 | 89.07  | 82.97 | 66.13 | 33.01 | 6.98  |
| 3 Month's Ago<br>09-28-2021             | 0.00  | 100.00 | 93.35 | 84.83 | 57.49 | 24.06 |
| Start of<br>Calendar Year<br>12-29-2020 | 38.14 | 61.86  | 40.77 | 27.90 | 10.74 | 0.00  |
| Start of<br>Water Year<br>09-28-2021    | 0.00  | 100.00 | 93.35 | 84.83 | 57.49 | 24.06 |
| One Year Ago<br>12-29-2020              | 38.14 | 61.86  | 40.77 | 27.90 | 10.74 | 0.00  |

#### Intensity:

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

Author: Brad Pugh CPC/NOAA









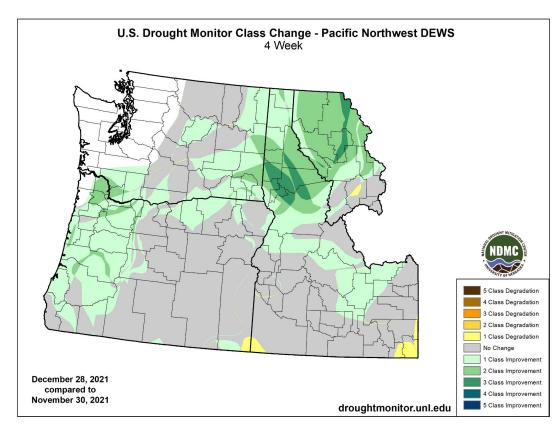
droughtmonitor.unl.edu

#### **One Month Drought Change**



Above normal precipitation this fall increased soil moisture and streamflows which helped decrease the drought severity across the Inland NW. The recent rounds of winter snow and colder temperatures aided in building the mountain snowpack.

https://droughtmonitor.unl.edu/Map s/ChangeMaps.aspx

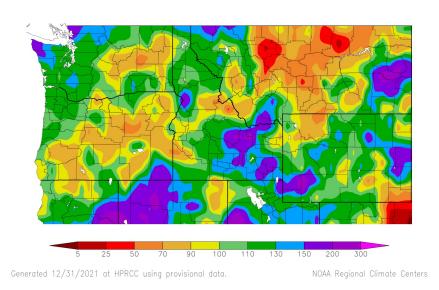


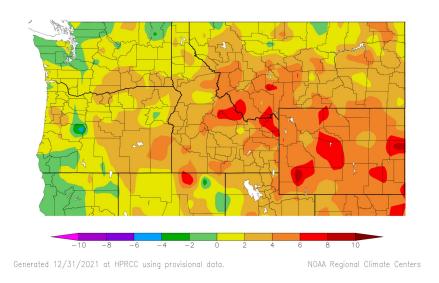
#### **Last 90 Days**



Percent of Normal Precipitation (%) 10/2/2021 - 12/30/2021







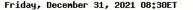
Near to above normal precipitation was found across much of the Inland Northwest. The wetter areas were near the Cascades, northern mountains and Idaho Panhandle.

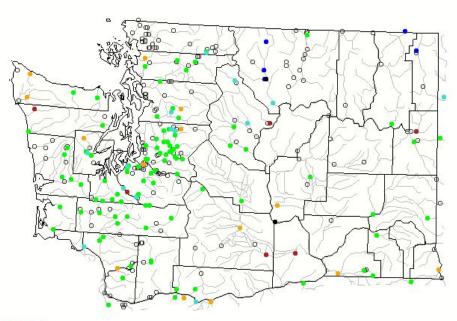
Temperatures have been running near to above normal region-wide, despite the cold snap in late December.

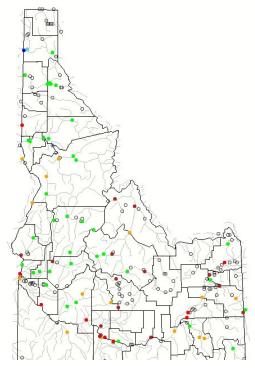
https://hprcc.unl.edu/maps.php?map=ACISClimateMaps

#### **Drought Impacts - Streamflows**









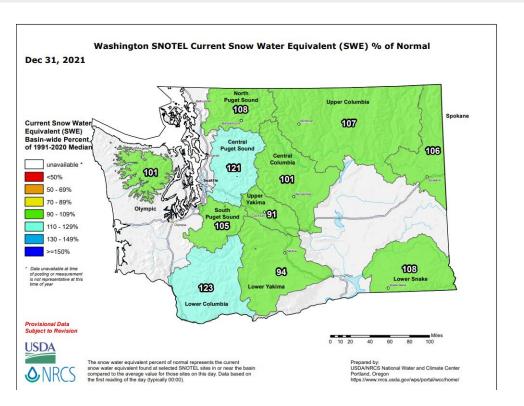
Friday, December 31, 2021 08:30ET

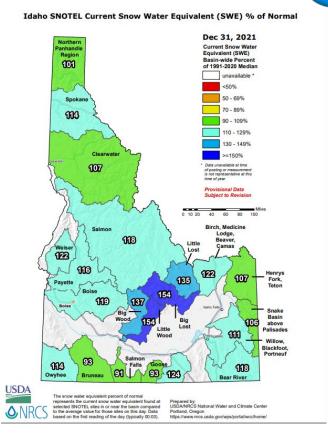
#### **USGS**

Stream flows have returned to near normal levels across the Inland NW after record low flows late this summer. Above normal flows remain over parts of north central Washington, while near to below normal flows stretch across the Columbia Basin, into the Palouse, Spokane, and lower Snake river basins.

https://waterwatch.usgs.gov/

#### **Drought Impacts - Mountain Snowpack**





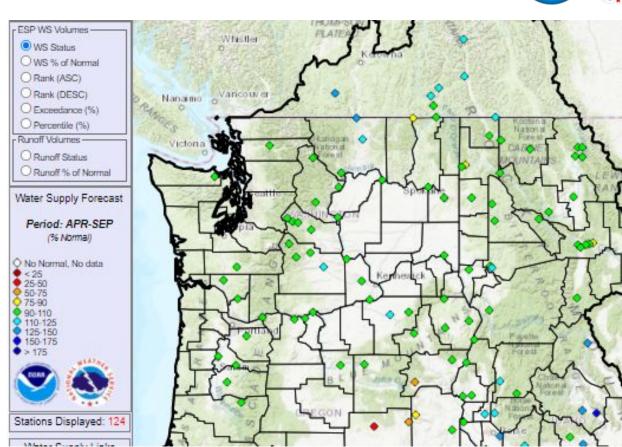
Mountain snowpack had an early start across the northern Cascades this fall. The colder temperatures in December helped the snowpack build elsewhere. . <a href="https://www.nrcs.usda.gov/wps/portal/wcc/home/">https://www.nrcs.usda.gov/wps/portal/wcc/home/</a>

## **NWRFC Water Supply Forecast**



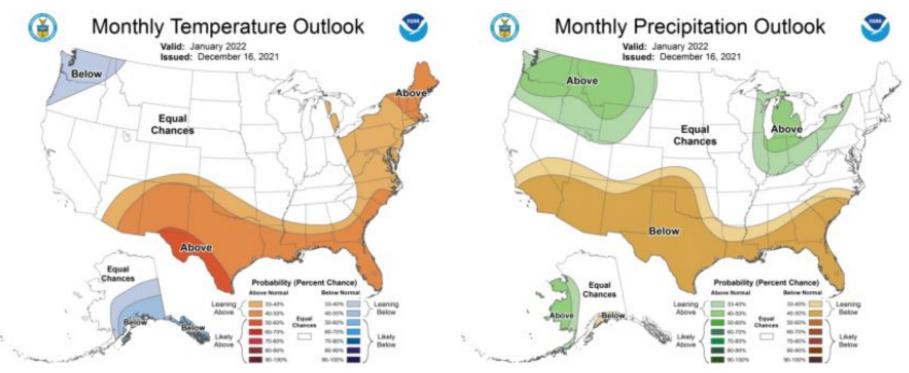
October 1st marked a new Water Year. The updated water supply forecast looks optimistic for the coming year with most areas around normal for 2022.

https://www.nwrfc.noaa.gov/rfc/



#### **CPC One Month Outlook ~ January**

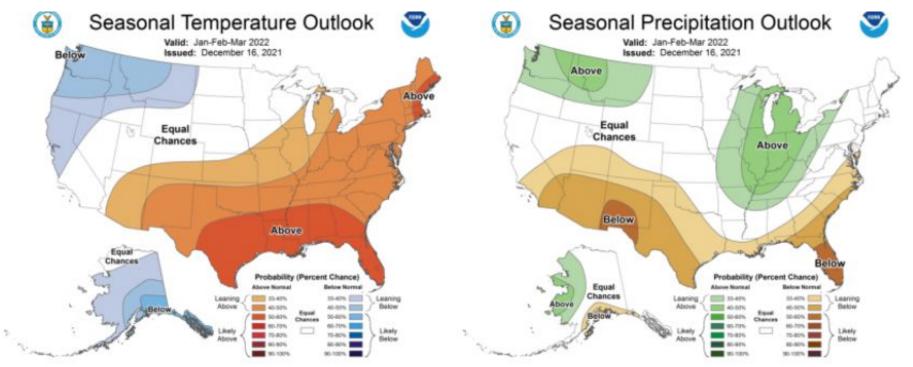




.The Climate Prediction Center`s outlook for January favors below normal temperatures and above normal precipitation for the Inland NW. <a href="https://www.cpc.ncep.noaa.gov">https://www.cpc.ncep.noaa.gov</a>

## **CPC Three Month Outlook ~ December to February**

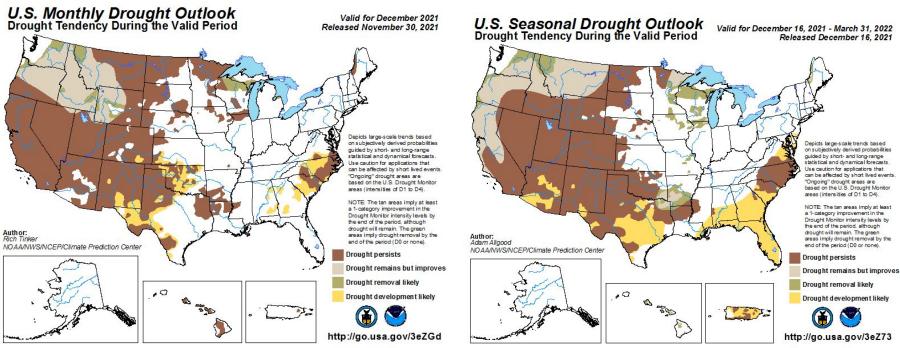




The three month outlook for January to March 2022 continues the trend of below normal temperatures and above normal precipitation. <a href="https://www.cpc.ncep.noaa.gov">https://www.cpc.ncep.noaa.gov</a>

## Monthly and Seasonal Drought Outlook





The Monthly and Seasonal Drought Outlooks both suggest drought conditions will remain but show some improvements. There is a potential for some drought removal across parts of north central, northeast Washington and even the northern Idaho Panhandle in the coming months. <a href="https://www.cpc.ncep.noaa.gov/">https://www.cpc.ncep.noaa.gov/</a>

#### La Nina Outlook



- CPC CONSOL Dynamical Models

- NASA GMAO

■ NCEP CFSv2

- AUS-ACCESS

- GFDL SPEAR

■ CMC CANSP

■ JMA ■ COLA CCSM4

SAUDI-KAU

INCAS ICM

SINTEX-F

Statistical Models

OPC MRKOV
OPC CA
OP IAP-NN

- CSU CLIPR - UCLA-TCD

- NTU CODA

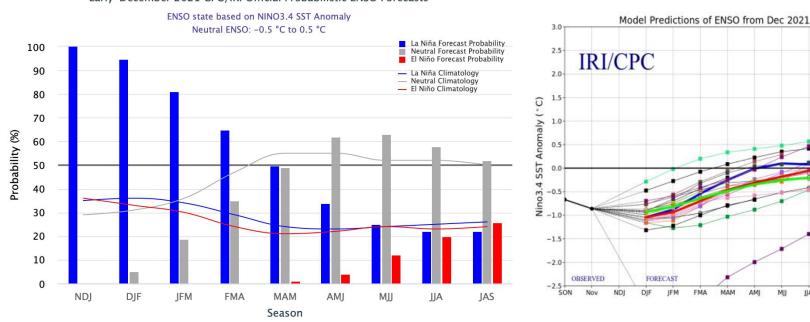
ASO.

- LDEO

ECMWF
 MetFRANCE

DYN AVG





A La Nina Advisory remains in effect for this winter season. <a href="https://www.cpc.ncep.noaa.gov/">https://www.cpc.ncep.noaa.gov/</a>

#### **Drought Summary**

- Slow improvements continue across the Inland NW with shrinking of Extreme (D3) Drought in southeast Washington and Severe (D2) Drought in Idaho Panhandle.
- The Seasonal Outlook favors below normal temperatures and above normal precipitation for January and through March 2022. This favors improving drought conditions across the region in the months to come.
- As for drought impacts, stream flows have returned normal. Mountain snowpack has increased in the last month due to the cold temperatures and rounds of snow.
- Please report any drought conditions or impacts to NWS Spokane at <a href="mailto:nws.spokane@noaa.gov">nws.spokane@noaa.gov</a>
  or through the National Drought Mitigation Center at <a href="https://droughtimpacts.unl.edu/">https://droughtimpacts.unl.edu/</a>

#### **Drought Related Web Sites**

U.S. Drought Portal: <u>www.drought.gov</u>

US Drought Monitor: www.droughtmonitor.unl.edu

Western Region Climate Center: /www.wrcc.dri.edu

Climate Prediction Center: <u>www.cpc.ncep.noaa.gov</u>

National Interagency Coordination Center: <u>www.nifc.gov</u>

USGS Streamflows: <u>www.waterwatch.usgs.gov</u>

NWS Water Supply Forecasts: <u>www.nwrfc.noaa.gov</u>

US Army Corps of Engineers: <a href="https://www.usace.army.mil">www.usace.army.mil</a>

NRCS Water Supply Forecasts: <u>www.wcc.nrcs.usda.gov</u>

Idaho Department of Water Resources: <u>www.idwr.idaho.gov</u>

Idaho Climate Office: <a href="https://www.uidaho.edu/extension/climate-services">www.uidaho.edu/extension/climate-services</a>

Washington Department of Ecology: <u>www.ecology.wa.gov</u>

Washington Climate Office: www.climate.washington.edu

NWS Spokane: <u>www.weather.gov/Spokane</u>